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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,561	07/26/2001	Toshiharu Katsuki	Q65527	5480

7590 07/18/2003

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 07/18/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,561

Applicant(s)

KATSUKI ET AL.

Examiner

Cheryl Juska

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II, claims 6-10, in Paper No. 7 is acknowledged. Claims 1-5 and 11 are withdrawn as non-elected.

Claim Objections

2. Claims 6 and 7 are objected to because of the following informalities: A method claim should list active method steps, such as "applying a solution" rather than 'the first process for application of a solution.' Additionally, the format and punctuation of the preamble confuses the point that the *fabric* is comprised of synthetic fibers. Furthermore, the phrase "(herein defined as...)" is confusing in a claim format since it is narrative. The term "non-printing side" is definite without said phrase. Appropriate correction is required.
3. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. It is unclear how claim 9 further limits claim 6, which already states that the second solution is applied from the non-printing side of the fabric.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 and 7 are indefinite because it is unclear what the distinction between “synthetic fiber” and “fiber containing synthetic fiber.” Does applicant intend the latter phrase to encompass blends of synthetic fibers and other fibers?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 6, 9, and 10 are rejected under 35 USC 102(b) as being anticipated by US 5,683,784 issued to Nakao et al.

Claims 6, 9, and 10 are rejected under 35 USC 102(e) as being anticipated by US 6,326,323 issued to Shimano et al.

Applicant claims a method of preparing a synthetic fiber fabric for use in inkjet printing. The method comprises (a) applying a first solution containing an ink holding agent of high wettability to the fabric so that said solution penetrates into said fabric and (b) applying a second solution of an ink holding agent of low wettability from the fabric's non-printing side so that said

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solution penetrates into said fabric. The first solution is applied by padding and has a viscosity in the range of 10-200 cps. In one embodiment the fabric comprises a napped fabric (i.e., pile) wherein the first solution penetrates into the nap fibers and ground fibers on the printing side and the second solution penetrates the ground fibers on the non-printing side.

Both Nakao and Shimano disclose substrates for inkjet printing comprising a fabric coated with a solution on one side and a different solution coated on a back side or non-printing side of said fabric. See Nakao, col. 1, lines 27-33; col. 2, lines 16-30 and 54-58; col. 3, lines 8-13; and claims 1 and 10. See Shimano, abstract; col. 3, lines 10-17; and claim 1.

It is noted that the present claim limitation to the types of solutions is not given patentable weight at this time. It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 135 USPQ 31. The features of the particular solutions do not materially affect the method steps of applying the solutions. Since applicant's method merely comprises applying a first solution to a fabric on one side and applying a second solution to the opposite side, the disclosures of Nakao and Shimano anticipate claims 6, 9, and 10.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 7 is rejected under 35 USC 103(a) as being unpatentable over the cited Nakao patent in view of JP 09-279486 issued to Maeda et al.

Claim 7 is rejected under 35 USC 103(a) as being unpatentable over the cited Shimano patent in view of JP 09-279486 issued to Maeda et al.

Neither Nakao or Shimano teach an inkjet substrate which is a napped fabric. However, said napped fabrics are known in the art. For example, Maeda teaches coating a pile fabric to prepare it for inkjet printing (abstract and translation section [0002]). Thus, it would have been obvious to one of ordinary skill in the art to substitute a napped fabric for the fabrics of Nakao and Shimano in order to produce an aesthetically pleasing fabric which can be inkjet printed on. Therefore, claim 7 is rejected as being obvious over the cited prior art.

10. Claim 8 is rejected under 35 USC 103(a) as being unpatentable over the cited Nakao patent in view of EP 1 122 068 issued to Nakamura et al.

Claim 8 is rejected under 35 USC 103(a) as being unpatentable over the cited Shimano patent in view of EP 1 122 068 issued to Nakamura et al.

Neither Nakao or Shimano teach applying the first solution by padding. Nakao teaches the preferred application is by knife coater or dip coater (col. 2, lines 20-23), while Shimano teaches application by knife coaters, gravure coaters, air knives, die coaters, or the like (col. 5, lines 34-36). However, the method of padding a solution onto a fabric is well known in the art as an equivalent method of applying a solution to a fabric. For example, Nakamura teaches applying an ink acceptor solution containing an ink holding agent and a synthetic resin onto an inkjet fabric by padding, spraying, dipping, coating, laminating, gravure, or inkjet itself (abstract and page 4, lines 16-17). The preferred method of application is by padding (page 4, lines 17-

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20). Thus, it would have been obvious to one of ordinary skill in the art to substitute a padding process for the coating processes taught by Nakao and Shimano, since said padding method is an art recognized equivalent method of solution application. Therefore, claim 8 is rejected as being obvious over the cited prior art.

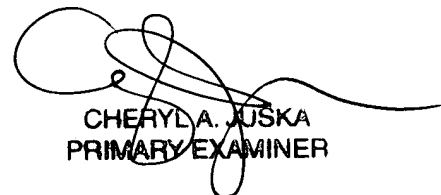
Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


CHERYL A. JUSKA
PRIMARY EXAMINER

cj
July 12, 2003